



IPW

THE UNITED STATES PATENT AND TRADEMARK OFFICE

AFU-24

PATENT APPLICATION

JAMES R. MARKHAM, ET AL.

Application No. 10/789,651

Filed: February 27, 2004

ANALYZER FOR MEASURING
MULTIPLE GASES

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

INFORMATION DISCLOSURE STATEMENT

Pursuant to the provisions of 37 CFR 1.97 and 1.98, Applicants provide the present Statement to disclose the prior art to which consideration has been given in connection with preparation and filing of the captioned application:

“The Application of FT-IR Spectroscopy To Turbine Engine Exhaust Measurement” AIAA 2000-2212, D. Marran, et al. (presented June 19-22, 2000);

“Improved Methodology For Turbine Engine Emission Measurements,” Paul A. Jalbert, et al. – (GT-2002-30606);

“Evaluation Of The MKS On-Line FTIR Multigas™ Analyzer For Gas Turbine Application,” William Oliver, et al. (GT2003-38656, Proceedings of the ASME TURBO EXPO, Atlanta, Georgia, June 16-19, 2003);

“Oxygen sensing characteristics of limiting current-type sensors with microstructural and structural variations in diffusion barrier,” Jong-Heun Lee, et al., Materials Letters 26 (1996), 27-33;

“Thin film air-fuel ratio sensor,” Haruyoshi Kondo, et al., Sensors and Actuators B, 13-14 (1993) 49-52;

“Limiting current characteristics with regard to oxygen and carbon monoxide in oxidizing and reducing atmospheres,” Jong-Heun Lee, et al., Solid State Ionics 86-88 (1996) 1087-1093);

" Hydrogen sensing using titania nanotubes," Oomman K. Varghese, et al.,
Sensors and Actuators B, 93 (2003) 338-344.

The documents identified above are listed on Form PTO-1449, and a copy of each
is enclosed herewith.

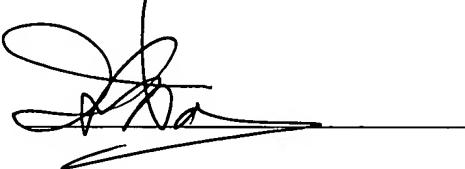
Respectfully submitted,
JAMES R. MARKHAM, ET AL.

~~By~~
Ira S. Dorman

Attorney for Applicants
Reg. No. 24,469
Tel. (860) 528-0772

CERTIFICATE OF MAILING

I, IRA S. DORMAN, hereby certify that this correspondence is being deposited with the
United States Postal Service, postage prepaid, in an envelope addressed as set forth on the
first page hereof, on September 20, 2004.



FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE (Rev. 2-32) U.S. PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. <u>AFU-24</u>	SERIAL NO. <u>10 / 789,651</u>
O I P E SEP 22 2006 U.S. PATENT & TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		APPLICANT <u>JAMES R. MARKHAM, ET AL.</u>	FILING DATE GROUP

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		"The Application of FT-IR Spectroscopy to Turbine Engine Exhaust Measurement" (presented June 19-22, 2000)
		"Improved Methodology for Turbine Engine Emission Measurements" (GT-2002-30606)
		"Evaluation of The MKS On-Line FTIR Multigas™ Analyzer For Gas Application" (June 16-19, 2003)
		"Oxygen sensing characteristics of limiting current-type sensors with microstructural and structural variations in diffusion barrier" (1996)
		"Thin film air-fuel ratio sensor" (1996)
		"Limiting current characteristics with regard to oxygen and carbon monoxide in oxidizing and reducing atmospheres" (1996)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE (Rev. 2-32) PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. <u>APU-24</u>	SEAL NO. <u>10 / 789, 651</u>
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <small>(Use separate sheets if necessary)</small>		APPLICANT <u>JAMES R. MARKHAM, ET. AL.</u>	
		FILING DATE	GROUP

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

"Hydrogen sensing using titania nanotubes" (2003)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.